



September 1960

THE U. S. ARMED FORCES AND SEMANTOGRAPHY

In April 1959 I received the following letter which raised my hopes. It came from the Headquarters of ROME AIR DEVELOPMENT CENTER, Air Research and Development Command, United States Air Force, Griffiss Air Force Base, New York

Dear Mr. Bliss,

We in the Intelligence Laboratory of the Rome Air Development Center, United States Air Force, are very much interested in Graphic Language and the effective use of graphics to convey information without regard to language barriers. In our search for information on what has been already accomplished in this field, we were informed by Miss Phillis Baxendale of IBM Research Laboratory at San Jose California that you have published "A Synopsis of Semantography" which is reported to be a non-alphabetic symbol writing readable in all languages.

This laboratory desires to acquire a copy of this publication. If it is available from your Institute will you please send us a copy? It would be of great value if you would pass on to us any information regarding further work you have accomplished (in the field of Semantography) since 1949. If you know of another publications or sources of information on this subject, would you pass this on also? Any information that you can send us will be appreciated.

Should there be any cost involved in complying with the above request, this Center should be notified before any action is taken. If the information is available without cost, it is requested that it be forwarded to: Commander, Rome Air Development Center, ATTN: ROWIED, Griffiss Air Force Base, New York. Sincerely

Richard L. Libby

Chief, Intelligence Laboratory

I got greatly excited about this letter, so much indeed, that I forgot to remember that I had dealings before with the U.S. Air Force though not directly. Already in 1951 Professor Dodd of the University of Washington, Seattle, a friend of Prof. Reiser and himself the inventor of Model English, and Tilp, a new international language (see S.S. 185) got in touch with me, sent me his publications on his linguistic inventions and informed me also that he has a large contract with the U.S. Air Force concerning the dissemination of information by leaflets scattered by airplanes over enemy territory. I took this opportunity to hitch my Semantography to his working with the Air Force and sent him a letter, outlining my symbols for ground to air communication of marooned or crashed parties who have to communicate to foreign aircraft overhead by laying out symbols which can be read in any language. This letter contained also sample symbols, and it forms now S.S. 70 under the title SEMANTOGRAPHY FOR AVIATION EMERGENCIES. Of course, nothing came of this endeavour. Five years later Prof. Dodd wrote to me "Some scouts for the mechanical translation project of the U.S. Air Force were in my office yesterday working up a bibliography in this whole field. I gave them your three books and they are planning to order them for their library in that project." This was in 1956, but I received no order.

I answered Libby's letter immediately with a detailed demonstration of my symbols, sent him relevant issues of the series and informed him about the 3 books and the whole series. I was delighted when later on an order came through for everything I had written. Then I received another order for the books and the series, this time from a book importing firm in New York with the advice to send the books to Air Development Center of the U.S. Air Force, Griffiss Air Force Base. Believing that the same order was duplicated by some mistake I informed the book company, who in turn sent me the answer to their enquiry to the Air Force. It turned out that another department at the same base wants also all my writings, and that the second order is therefore not a mistake. This made me even more hopeful and I despatched another detailed letter to Libby, showing this time other symbols and how they could be used, not only for ground to air communication, but also for communication between aircrafts by TV closed circuits. Of all these letters to Libby I received no answer whatever. I was at a complete loss about this. After all, Libby was so much interested, as he wrote. The least he could do was to acknowledge my letters. But there was complete silence, and today writing these lines more than one and a half years later, I am still without any communication from the Air Force, except that I got a cheque for the first order. Meanwhile all my hopes were down at the lowest ebb again.

I then received an interesting enquiry from a German engineer in Berlin, Mr. Owe Fahlke. It turned out that he was working on electronic computers, that he lived in the Far East, could write Chinese well, and therefore got interested in my work. I sent him all information, and he then wrote a detailed letter saying that my symbol system is, in his opinion, the only system which can be used for electronic machine translation. This kindled another hope.

In Shanghai I became acquainted with an European refugee who taught Chinese to foreigners at Shanghai's French Aurora University. He became interested in my work, but when I asked him to give me some help, he told me that no one is going to help me and that this is the brutal fact which I should learn quite from the beginning of my endeavours of getting help from other scholars. I was very much shocked and simply refused to believe him that scholars do not help each other. Prof. Dodd of Seattle University informed me then in 1951 that Dr. Reifler, the man from Shanghai is now professor at the university's Far Eastern Institute, and that he is engaged in machine translation. I wrote to him, he wrote back, but he remained true to form: no help. Now, Fahlke's letter and his praise of my system for machine translation gave me an idea to approach the American firms which manufacture electronic computers, and/or are working on machine translation. I found their addresses from their relevant advertisements in SCIENTIFIC AMERICAN. This story is told in a separate issue SEMANTOGRAPHY AND MACHINE TRANSLATION S.S.No.195.

The next event in this tragicomedy was an article in a Sydney Sunday paper. The title: CALLING ALL CRACKPOTS, and the subtitle: An Army wants your inventions. The article then told of the National Inventors Council of the U.S.A, managed by the U.S. Department of Commerce in Washington D.C. This council publishes a periodical under the title INVENTIONS WANTED BY THE U.S. ARMED FORCES, and the article writer brought some sample problems for which the armed forces want an inventor to come up with a solution. Naturally, the newspaper hack told of some crackpot looking problems, and among them he listed one:

"Simplified working vocabulary applicable to most field situations in which non-English-speaking personnel may be used."

I wrote to Washington for this brochure, and when I got it I found that they listed thousands of problems which need a solution most urgently. After a correspondence with the department I then formulated a Memorandum, which forms the following 6 pages of this issue, and which in itself is self-explanatory. Together with this memorandum I sent them every issue of my Series which show my symbols in a way applicable to their needs. To make sure that all the people interested in the Pentagon should get a copy I enquired and then sent three complete dossiers with three complete collections of all the relevant issues of the Semantography Series. In addition, I informed them that the 3 books are in the Library of Congress, and that I shall be glad to send another set to them should this be necessary. I received a letter saying

"your information will be made available to the armed services for consideration and comment. As soon as we have the benefit of their findings we will write to you again."

I sent them the dossiers in April 1960. Now we have September 1960, and I am without any answer, least of all a request for more information or more detailed answers to special problems. I have given up hope. But this page has still a few lines left, and should anything interesting come up from Washington I shall tell it herebelow, or add another page or two.

I wish to close this introductory story to my Memorandum with a little comedy to relieve the stress it causes me. I sent also copies of the memorandum to the Australian Minister for the Army, saying that the proper way for an Australian invention to be presented to the U.S. Armed Forces is via the Australian Government. I then got back a nice letter in which the minister said that his officers have studied my invention but found it in-adaptable to the Australian army. I then wrote back, saying all I wanted was an introduction to the American Forces. Whereupon the letter writer in the name of the minister hit on a grandiose idea, an idea practised in all bureaucratic departments of all countries. He informed me that he has forwarded my request to the Australian Minister for External Affairs. Naturally here the memorandum found its proper grave. This was not new to me. Some years ago I sought a personal interview with the Australian Ambassador to Washington, Dr. Spender. I met him in Sydney and he promised to bring my work to the knowledge of the U.S. Armed Forces. But nothing came of it.

October 1960 and here is the answer from the Armed Forces, as told by the Council: "They report that the symbolic system you have developed may have applicability to the 'Simplified Working Vocabulary' problem. However, the use of standardized visual symbols belongs to the second phase of the problem, after it has been determined 'what must be communicated'. Thank you nevertheless, etc.etc."

And so another great hope went down the sink, drowned by military bureaucracy.

BLISS INSTITUTE

(Formerly Semantography Institute)

2 Vicar Street, Cooges
SYDNEY, N.S.W., AUSTRALIA
Telephone FX 8140

More copies of this memorandum and attached papers will be supplied on request.

M E M O R A N D U M

submitted to the National Inventors Council, U.S. Department of Commerce.

Washington D.C. concerning the Invention wanted by the Armed Forces and described in the November 1959 issue, page 43, problem No. 1310 as follows:

THE PROBLEM

SIMPLIFIED WORKING VOCABULARY APPLICABLE TO MOST FIELD LOGISTICAL SITUATIONS IN WHICH NON-ENGLISH-SPEAKING PERSONNEL WILL BE USED.

PRESENT SITUATION AND REQUIREMENTS. The language barrier or more generally the inter-language communications barriers limit the effective and rapid utilization of indigenous personnel in our field supply operations. The first logical approach to such problem is to decide what must be communicated and how it is best accomplished (by spoken words, visual symbols such as markings, etc.,) If we can codify and perhaps simplify the basic communication elements, it should be far easier to establish effective working relationships between logistical supervisors and indigenous personnel with whom they must work. Furthermore translations to any known language could be prepared beforehand, and tested for points of confusion.

THE SOLUTION IN "VISUAL SYMBOLS" AS PROPOSED BY THE NATIONAL INVENTORS COUNCIL

This memorandum offers Semantography for (to use a military term) "Breaking through the Babel Barrier". Semantography operates with 100 symbol elements which together are used to form pictorial, almost self-explanatory symbols for interlinguistic communication in science, industry, commerce, communication, etc, and of course coordination of military forces who speak different languages. In this respect Semantography can be applied to military situations as described below which are much wider in scope than those stated in the quotation above.

PUBLICATIONS AND PRAISE

Semantography is not a mere idea. It has been worked out in detail and laid down in the following publications: (published by the Semantography Publ.Co.Sydney,address SEMANTOGRAPHY, 100 Symbol Elements to overcome Babel in Reading, as above)
Writing and Thought.

by C. K. Bliss (3 volumes) Library of Congress
Catalog Card No. 55-65550

THE SEMANTOGRAPHY SERIES (163 issues have appeared so far)
by C.K. Bliss and others Library of Congress
Catalog Card No. 55-14351

Professor Oliver L. Reiser of the University of Pittsburgh read a paper on Semantography to the American Association for the Advancement of Science, under the title

UNIFIED SYMBOLISM FOR WORLD UNDERSTANDING IN SCIENCE

An enlarged version of this paper is contained in Semantography Series No. 150. The Library of Congress, Harvard, M.I.T. and other important libraries have bought all publications and given standing orders for all future ones.

Bertrand Russell, Julian Huxley and other eminent scholars have praised Semantography (see Semantography Series No. 6,) and other issues referring to pronouncements of Prof. O.L.Reiser, Prof. Stuart C.Dodd(Seattle), Prof. C.Washburne (New York), Prof. Hogben, Prof. Meredith, Prof. Bailey, Prof. Mitchell, Prof. Kluckhohn (Harvard) etc.etc.

FIRST APPLICATIONS

It may well be that its first application on a larger scale will be by military forces. The history of many innovations in medicine, chemistry, physics, etc, shows that they have been used first in a military emergency. Then they have found their way into the life of many nations. On a small scale the idea has already proved its worth. It is already a practical reality in a field where more people get killed and maimed than in war: on the motor roads of the world. Warning signs written in the native tongues are taken down in all countries and replaced by symbols. This symbol  means A CURVE TO THE RIGHT in all languages, and is more quickly grasped, (even by the natives) especially in rain, fog, darkness and drunkenness, than complex alphabetical letter combinations.

Visual symbols in mathematics like $1 + 2 = 3$ can be read and understood in all languages without translation. Professor Basil Hall Chamberlain has even prophesied that "Symbolic writing will surely achieve the final victory over phonetic writing." Semantography can bring about "One Writing for one World".

ANOTHER ADVANTAGE UNHEARD-OF IN ANY OTHER LANGUAGE

An important advantage of Semantography is its inherent semantics and logic which elevates it over any spoken and written common language. Anyone who has received a short training in it, will automatically recognise any vagueness and ambiguity even in his own mother-tongue. This too has immediate military applications. Many a time a commander in the field has received an order which contained vague words. Imagine an officer or a pilot who receives the following order "Attack if success is feasible." This places the officer in a mental dilemma which makes his task even harder. If his attack fails, with the loss of life (perhaps even his own) - it was his error of judgement. He shouldn't have attacked. No blame can fall on his superior.

In Semantography the relevant word "if" in the statement above is symbolised by two symbol elements; the first is the mathematical sign we learn in school $>$ indicating a relationship between various facts, as $a > b$. The second symbol element is the well-known question mark: $?$ Consequently the meaning of "if" is symbolised thus $>?$ indicating a relationship which is questionable (Attack if success is feasible) Once military men have received a short training in the logic and semantics of Semantography they will know immediately that "if" makes the order vague and ambiguous. It must be replaced by a more precise directive. This advantage of Semantography is applicable not only to military men speaking different language. It works with men who speak the same language.

A TYPEWRITER FOR SEMANTOGRAPHY

The overwhelming advantage of Semantography is of course the fact that a directive, a manual, a paper, a letter, even a book, anything written, typed or printed in Semantography can be read and understood in all and any language. Underwood Corporation and IBM have agreed to adjust an ordinary-sized typewriter for the typing of Semantography. Only the capital letters are removed (which are not necessary anyway) and replaced by symbol elements. The small letters remain for the typing of names, words or even complete communications in all languages using the Latin alphabet. This has immediate application in the translation of papers in electronic apparatuses.

ELECTRONIC TRANSLATION OF LANGUAGE AND MILITARY EMERGENCIES.

As a number of men working on electronic language translation have shown interest in Semantography, the author has (in order to speed up interest) sent out recently circulars to American firms working in the field of electronic computers and T.V. circuits. Here below are some paragraphs from the circular, referring to military situations:

"The United States is trying to rally the countries of the free world in defence organisations like NATO, SEATO, ANZUS, the Pan American Organization, etc., etc. However, a formidable obstacle to communication and coordination of many millions of people has arisen: language. Consider squadrons of the Nato forces flying on a mission. How can American pilots and those who understand only French, Dutch, Danish, Norwegian, Spanish, Portuguese, etc., etc. communicate over the intercom? The answer is: they can't. Consider this peacetime calamity. An American pilot blunders through fog into communist territory. A Russian fighter appears who hears, but cannot understand, the pilot's plea: "Don't ^{shoot}; I lost my way. I give myself up. Lead me to the landing field!" The Russian understands only Russian and the language of his Russian guns. And he let them speak. A world war can be started by such incidents. Consider the co-ordination of armies of various countries. Millions of tons of supplies, ammunition, arms, vehicles, etc., etc. as well as millions of men have to be shipped with proper directives. Millions of papers have to be typed, translated and duplicated. Wouldn't it be a boon if such directives can be read in all or any language - without translation? Yes, but it seems impossible.

Consider the vast amount of scientific information which pours out from many universities of many countries in many languages. How can a quick translation be obtained without translators? The answer is: it can't.

Alas, the hopes of the new crop of electronic machine linguists have been dimmed to despair. Languages are written in various word order, various grammar, various idiomatic expressions and semantic interpretation. The very same statement can be expressed in the very same language in so many different forms that misunderstanding or even nonsense may result when translated by electronic computers.

An entirely new idea in communication across all languages is needed - not Esperanto or Basic English or a new international language which some machine linguists are now trying to evolve. All these languages are "foreign languages" to the many millions of people who need to communicate with each other. They all stick to their mother tongue - even in the United States, in Canada, Australia and elsewhere, where they go on speaking French, or German, or Ukrainian, or Italian for centuries. Units of the Canadian army from certain provinces have to be commanded in French. They don't understand English. In the first world war recruiting posters in the U.S.A. had to be printed in 26 different languages. And foreign language teachers of all countries have admitted utter failure. A few gifted pupils excepted, most students acquire very little even in years of study." (End of quotation)

YES, BUT WHAT WE NEED IS SPOKEN COMMUNICATION.

One might think that Semantography is an unnecessary round-about way. Besides it cannot be spoken. Why not compile a "simplified working vocabulary" as the National Inventors Council wants it? It should be easy to compile such a vocabulary from Esperanto. Even better, why not use the 850 words of Basic English? After all, Esperanto is known and taught for 80 years. Basic English is known for 40 years. And yet - the very fact that the National Inventors Council advertises for a "simplified working vocabulary" is proof enough that Esperanto and Basic English have been found wanting. First, people have great difficulties in learning a foreign language, including Esperanto. Second, English speaking people have found it impossible to restrict their speech to the 850 words of Basic English. A new method is needed. Let us consider the following international symbol and its many meanings in English



go, go on, go ahead, go forth, get on, get going,
move, move on, get a move on, forward, onward,
progress, advance, proceed, beat it, scam, get lost,
etc. etc.

Even if a diligent foreign soldier has acquired many English words, some of the ones mentioned above will be beyond his understanding. Even those he understands he has to translate it into his own language mentally. In an emergency it may be too late. But the symbol tells him the story quickly and without translation. Even more, the logic and semantics of Semantography tells him that the arrow symbol standing alone is insufficient. The precise direction by compass or landmark must be added.

HOW TO COMPILE THE SIMPLIFIED WORKING VOCABULARY

Let us assume that say 10 languages are used by the combined armed forces of the free countries. Let us further assume that those military men who will direct the co-ordination of forces and supplies have learned the symbols of Semantography. And let us further assume that the United States will be entrusted in providing this coordination. Then English, or Anglo-American as it is called, will be the leading language. It would then be easy to compile a simplified working vocabulary TO FIT THE SYMBOLS. We may choose one word - and one word only - to represent the meaning of this arrow symbol →. We shall choose those words which are nearest to international words of Greek and Latin origin. We shall then choose the word "progress" for → from the Latin progressus. It has its similar counterpart in most important languages. Similarly this symbol ← shall be expressed by "regress" (not: get back, retreat, come back, etc). In the end, we would have a simplified working vocabulary in English to be used together with the symbols where needed. Similarly, we would compile a working vocabulary of all other 10 languages in which again one word, and one word only, would be chosen to express one symbol. Imagine two patrols meeting. They speak different languages. But they would quickly understand each other when using a writing pad. Moreover, some may have a smattering of the working vocabulary. By saying the word (no matter how badly pronounced) and pointing to the symbol, they could easily make themselves understood.

AUTOMATIC MACHINE TRANSLATION OF MILITARY PAPERS

A number of linguists and electronic engineers have worked on machine translation for more than 10 years. The result is most discouraging. Some computers have been constructed which could translate a few hundred words of Russian into English. But the translation of whole texts using many thousands of words in various forms, word order, grammar and idiomatic expressions have proved utter failure. To understand this let us take only a few idiomatic expressions in English. To put is simple enough in meaning. To put down should be equally simple, yet it means also to write down (to put down on paper). To put up something on a shelf, is easily understood. But to put up a friend, means to provide for him accomodation overnight. And to put up with someone, means to suffer his presence. There are tens of thousands of such expressions in all the languages concerned. The task is almost impossible to perform, and we would always be afraid that nonsense might result.

Now let us consider the task with our symbols and their corresponding working vocabulary. We have to translate some military papers, manuals, directives, bills of lading, etc. The text is prepared in Semantography which forces the writer to utmost simplicity, utterly short sentences, using the active verb form and avoiding ambiguous and vague and incomplete statements as explained in previous paragraphs on the logic and semantics of Semantography. The text is then typed onto paper using a semantographic typewriter. Or better, we can use a typewriter which punches out a strip of holes to be fed into an electronic computer. Let us now imagine that we have programmed such computers to type out on an automatic typewriter the symbols fed in, and underneath each symbol the word in English, and underneath the word in say French. Each typed statement would thus appear in three lines. The first line in symbols, the second line in English, the third in French. This would make a word for word translation which in many cases would result in awkwardly simple statements. But the meanings would be clear, and if there is doubt, a glance onto the symbols would convey the meaning intended. Here is a sample sentence which use the symbol $\wedge$ for man (showing an upright human being with legs apart). The plus + symbol stands for and.

Symbols:	3 $\wedge$	.	$\wedge_1 + \wedge_2 + \wedge_3$	.
English:	3 man	progress	.	i and you and he
French:	3 homme	progresse	.	je et tu et il

Sure enough, the result would not please an English and a French linguist. The statements would be awkward. We would abandon me and use always i (with a small letter). We say in English I write to you. We would have to say I write you. This would have to do in French, though they say I you write. Once we use a number as in 3 men we need not use the plural men. Vague statements by which responsibility could be shirked, simply defy writing in Semantography. If someone want to say: "It is assumed that the party has adequate supplies" it doesn't work in Semantography. One has to say WHO assumes it, as "Colonel Soandso assumes that the party has adequate supplies." Each sentence must start with the "Agent" followed by the Action word (verb) etc.

The overall result would be gratifying. Translations would come out the electronic machines for everything wanted, be it a manual, an instruction, a directive, bill of lading, etc. The lengthy chapters of the 3 books on SEMANTOGRAPHY show that even scientific translations can be made, when simplified according to the rules of Semantography.

MESSAGES IN THE TRENCHES, THE TANKS, THE AIRPLANES, THE WHOLE WORLD.

American firms are already producing cheap TV cameras and portable transistor TV sets. We may consider groups of multilingual infantry units, or ships or air squadrons. The commander (or his signal man) has before him a writing pad on which is focussed the lens of the TV camera. He writes the message in symbols and speaks the English words which fit the symbols. The message is seen and the words are heard on every TV set. Prof. Reiser prophesies TV communication in Semantography over the entire globe, in his latest book.

Let us consider a situation in peace: an unarmed American plane has blundered into communist territory. The Russian fighter pilot hears, but cannot understand the plea. The Russian has no TV. The American may then activate a signal board which may be made to emerge above or below the fuselage, and may be made to turn into the direction of the pilot who should read the message. This signalling board is transparent and has behind cubicles containing electric lamps. The signal man inside the aircraft has before him a tracer board. Each symbol traced onto this small electric board appears outside. The pictorial symbol of a man who gives himself up may follow the outline of a man with hands lifted, thus $\times$. Of course, the question may be asked whether the Russian pilots will be instructed in the meanings of the pictorial symbols. They surely will. As an illustration let us remember that the London Board of Trade worked out a simplified flag signal code for British shipping only. The sailors of all other nations were only too quick to learn and adopt the code which made them understand all others.

Such a signalling device is only necessary when the Russian has no TV set in his plane. But if TV sets will be installed in combat planes of Nato and other forces, the Russians will be only too quick to follow suit. (see SEMANTOGRAPHY Book II, p. 366)

It is also likely that ships may use Semantography, either with a light signal board as described above for signalling at night (when flag symbols cannot be seen) or by TV at day time. At present any skipper and officer is supposed to be able to signal by morse in the international language at sea: English. However, the wars of the future will be waged with Asian and African nations. Their signalmen may not know English. But we will be in desperate need to communicate with them. It will be impossible to put into every ship, plane or tank a trained translator for Malay, Sighalese and the other 300 odd languages spoken in Asia and Africa. Only a pictorial symbolism can help, and we can be sure that our enemies will be only too quick to learn our symbol communication in order to make themselves understood to our personnel. Indeed, it is very likely that Russia will develop just such a medium of communication for the coordination of the communist forces of the world. This thought is aggravated by the following:

THE RUSSIANS ARE GETTING THE IDEA OF SEMANTOGRAPHY

The author has received various requests for his papers, the first from the Lenin-grad Academy of Sciences. He always declined pretending that his publications are "out of print." But then the Russians succeeded by using a well-known and respectable book company in London. The author learned only too late of the true destination. How long then will it take until the Russians will have another "first" in military matters?

THE U.S. AIR FORCE AND SEMANTOGRAPHY

A year ago the author received a request for all his papers from the Rome Air Research and Development Command of U.S. Air Force Griffiss Base, New York. He despatched them all. Then another order came in for a second set. This too was despatched and the author, gratified by the sudden interest, wrote a number of letters to Rome Air Research and Development Command, outlining Semantography for signals between a crashed and/or marooned party and foreign aircraft overhead. Unfortunately, no answer came to his letters, and the author simply did not know the true purpose and interest of the men of the U.S.A.F. in Semantography. A few days ago he learned of the work of these men through a note in a Sydney paper on telecommunication, which runs:

"Automatic reading of typewritten sheets and conversion of 200 characters per second into electric signals is accomplished by the Print Reader MX-2021. Development by Intelligent Machine Research Division of Farrington Manufacturing Company has just been announced by U.S.A.F.'S Air Research and Development Command. Machine will enter information into data processing gear, eliminating keyboard operators. Air Force says 30 such machines could read and proceed data at a rate of 10 million pages a year."

This refers only to processing of papers in English. It does not deal with machine translation. But the automatic reading machine described above could be easily adapted to "read" typewritten sheets in Semantography by scanning with a photoelectric device. Then automatically translations in the simplified working vocabulary of programmed languages could be churned out at once, as described in detail on page 2 ff.

PROFESSOR STUART C. DODD AND HIS MODEL ENGLISH FOR THE SIMPLIFIED WORKING VOCABULARY

Prof. Dodd is professor of sociology and director of the Public Opinion Laboratory of the University of Washington, Seattle, Wash. Years ago the U.S. Air Force gave him a contract for the study of the effects of psychological warfare by leaflets scattered from airplanes over enemy territory. Having been in touch with him before, the author wrote to Prof. Dodd and tried to interest him in Semantography for two aspects related to his work. The first is the recognition of vague and ambiguous words for propaganda purposes. The second is the use of Semantography for signalling between persons on the ground and aircraft overhead. Many a times a crashed or marooned party was unable to communicate with rescue aircraft appearing overhead. If the accident happens in a foreign country, the situation is hopeless - unless the crew members know of the pictorial symbols and lay them out on the ground. The foreign pilot in turn may drop a message written in Semantography. This method can also be used in remote areas as in the Canadian North where radio receivers and transmitters may not be readily available. The author has incorporated his suggestions to Prof. Dodd in Semantography Series No. 70 SEMANTOGRAPHY FOR AVIATION EMERGENCIES, which is attached to this memorandum.

The important part played by Prof. Dodd in this matter of inter-linguistic communication is his invention of Tilp and Model English. Tilp is a highly analytical linguistic device for international communication. Model English is more practical. Prof. Dodd maintains that we need not learn Esperanto and other auxiliary languages. We have already an international world language which is spoken by hundreds of millions of people: English. All we have to do is to make English easier for the foreigners. They complain and suffer under the great irregularities of spelling, pronunciation, grammar, etc. In short, if we try step by step to eliminate all these irregularities we would arrive at a model of a logical language. This is Model English which foreigners would quickly grasp. Prof. Dodd rejects Basic English because it forces the speaker to round-about ways. In Basic English you must say "I have knowledge". Said Prof. Dodd "Why not use "I know, I knowed, I think, you think, he think (not thinks), he thinked, goose and geese, mouse and mouses, thru instead of through, and so forth."

Unfortunately, Prof. Dodd faces the same dilemma as all the other advocates of a world auxiliary language have faced: the opposition of the orthodox linguists. They won't hear of Esperanto, of Basic English and of Model English. They could introduce a simplified logical auxiliary language into the schools of the world tomorrow - if only they want to do it. But they don't want it. They cling to all the irregularities of the jungle growth which forms the languages of today. They refuse to make their own language logical and regular. They will oppose all the ideas expressed here with regard to Semantography, as they have opposed all such ideas in the past. In view of the fact that Russia makes strenuous efforts to introduce Russian as a world language we should think very hard about the proposal of Prof. Dodd. The author proposes Model English for the "simplified working vocabulary" to fit the symbols of Semantography (p.3)

THE BACKGROUND OF THE AUTHOR

The reader of this memorandum should know that the author is not an inventor with his head in the clouds and devoid of realizing practical and impractical realities. On the contrary. The author is a practical engineer with a university degree and has been an industrial executive in an electronic firm for many years. He realized the immense practicability of the semantography of chemical symbolism. H_2O means water in all languages of the world. The pictorial symbols of electronics work beautifully with radio mechanics of all languages. This pictograph  means a condenser in all languages. And the pictorial symbols of road warning signs are too a practical reality. A study of the extensive content of chapters of his 3 books and the titles of the 163 issues of the Semantography Series will convince anyone that the author has done a thorough job and has proved that 100 symbol elements can indeed be used for communication in all fields of human endeavour, including even scientific communication. All these papers have been printed by the author and at his expense. Most of them are mimeographed. It is the old story that an inventor with a visionary idea has to battle alone, until the value of his work is recognized. It may well be that the military emergency which the free world is facing now will help this new idea along. The author places all his hopes in the National Inventors Council.

Never in the history of the human race was the threat of universal enslavement by the communist dictators greater than before. Worse even, they operate with words to befuddle millions of minds in the free countries. These fellow-travellers yearn for the day when the red armies of "liberation" will create the United Communist States of North and South America, the British Communist Commonwealth of Nations, etc. etc. Semantography can be used, not only for logistical and tactical coordination of the armed forces of the free world. Its greatest value is its logic and semantics which demasks the ambiguities, the demagogues, the fallacies of communist propaganda. The author hopes that the National Inventors Council will give him the opportunity to prove the practicability of all applications of his work including electronic machine translation, and that he will receive the means to publicise this idea in manuals and books. The following papers are attached to this memorandum:

Semantography Series No. 1, 2, 4, 6, 7, 8, 14, 43, 52, 98, 100-101, 134, 135, 150, 157, 163 (including the catalogs). Price of all papers \$ 33.70 post free, this price is explained by the small edition. It includes too the 3 books on Semantography.

The author expresses his willingness to cooperate with the National Inventors Council to the utmost. He will be only too glad to answer any criticism and any counter-argument in detail. He has gone through terrible experiences in world war two, has been a prisoner of the Germans in their concentration camps and of the Japanese in Shanghai. He has devised Semantography as a tool and a weapon against dictatorship, and he hopes it will be used for and by the free world.

C.K.Bliss, B.Sc.